In re Patent Application of: BYUN, II ET AL.

Serial No. 10/522,049

Filing Date: JANUARY 20, 2005

REMARKS

The Examiner is thanked for the thorough examination of the present application. Independent Claim 1 has been amended to more clearly recite the respective anisotropic conductive adhesive and dependent Claims 8 and 9 have been amended to more clearly recite the insulating resin solution, as helpfully pointed out by the Examiner. Other claims have also been amended to remove informalities. Claims 10-17 are being canceled without prejudice to file an application directed to the subject matter thereof.

Replacement Drawing Sheets are enclosed herewith, including corrected drawings for FIGS. 1 and 2 including a "Prior Art" designation, as helpfully suggested by the Examiner. In view of the arguments presented in detail below, it is submitted that all of the claims are patentable.

I. The Claimed Invention

Amended independent Claim 1, for example, is directed to a method for connecting microcircuits. The method includes providing an insulating resin solution and applying the insulating resin solution to each circuit board having circuit patterns. Moreover, the method includes aligning the circuit boards to face each other so that electrodes of the circuit boards face each other, in order to connect the corresponding electrodes of the circuit patterns formed in each circuit board. Additionally, the method includes positioning an anisotropic conductive adhesive between the circuit boards. The method

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further includes heating the circuit boards and applying a predetermined pressure to a side of each circuit board opposite the anisotropic conductive adhesive so that corresponding electrodes are connected each other.

II. Claims 1-9 Are Patentable

The Examiner rejected independent Claim 1 based upon U.S. Patent No. 5,800,650 to Anderson in view of U.S. Patent Publication No. 2003/0064147 to Fuji et al.

The Anderson et al. patent discloses a laminating process for interconnecting laminates 35, 45 including respective opposing conductive layers 22, 24 and dielectric coverlayers 62, 64. A conductive adhesive layer 70 of non-conductive material with conductive particles is used to interconnect the laminates 35, 45. However, the dielectric coverlayers 62, 64 are not an insulating resin solution and thus Anderson et al. fails to disclose applying an insulating resin solution to each circuit board having circuit patterns, as recited in independent Claim 1. The Examiner contends that this step is disclosed by the Fuji et al. publication.

The Fuji et al. publication discloses a method for applying resin solution to the surface of a printed circuit, and the Examiner contends it would have been obvious to use this method on the conductive layers discussed in the Anderson et al. patent. However, the Fuji et al. publication teaches applying a resin solution onto the surface of a circuit substrate for subsequent drying and expressly teaches away from laminating a

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resin solution onto a circuit substrate using the heating and pressing lamination technique of Anderson et al. (0007). Accordingly, there is no proper motivation to combine the references as the Examiner is using Applicants' specification as a template in an effort to combine disjoint pieces of the prior art using impermissible hindsight reconstruction.

Accordingly, it is submitted that amended independent Claim 1 is patentable over the prior art. Its respective dependent claims, which recite yet further distinguishing features, are also patentable over the prior art and require no further discussion herein.

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CONCLUSIONS

In view of the foregoing, it is submitted that all of the claims are patentable. Accordingly, a Notice of Allowance is respectfully requested in due course. Should any minor informalities need to be addressed, the Examiner is encouraged to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,

CIAN G. O'BRIEN

Reg. No. 55,792

Allen, Dyer, Doppelt, Milbrath & Gilchrist, P.A.

255 S. Orange Avenue, Suite 1401

Post Office Box 3791

Orlando, Florida 32802

Telephone: 407/841-2330

Fax: 407/841-2343

Attorney for Applicants

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this day of June, 2006.

Justi Don